

Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street 11th floor
Arlington VA 22209
703-812-0400 (voice)
703-812-0486 (fax)

MITCHELL LAZARUS
703-812-0440
LAZARUS@FHHLAW.COM

April 11, 2007

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

**Re: ET Docket No. 06-195, UltraVision Security Systems, Inc., Request
for Interpretation and Waiver
*Ex Parte Communication***

Dear Ms. Dortch:

On behalf of UltraVision Security Systems, Inc., pursuant to Section 1.1206(b)(2) of the Commission's Rules, I am electronically filing this letter to report an oral *ex parte* communication in the above-referenced docket.

Yesterday, Dennis Johnson of UltraVision, Patrick Murck of this office, and I met with James Burtle, Julius Knapp, Geraldine Matise, Karen Rackley, John Reed, Ron Repasi, Bruce Romano, Mark Settle, Alan Stillwell, and Anh Wride, all of the Commission staff.

We reiterated the points raised in UltraVision's pleadings in the docket. A copy of our presentation outline is attached.

Please do not hesitate to call with any questions.

Respectfully submitted

Mitchell Lazarus
Counsel for UltraVision Security Systems, Inc.

cc: Meeting participants

UltraVision Security Systems, Inc.

Request for Interpretation and Waiver of Section 15.511 of the Commission's Rules

ET Docket No. 06-195

April 10, 2007

Mitchell Lazarus | 703-812-0440 | lazarus@fhhlaw.com



UltraVision Security Systems, Inc.

- ❑ Wholly-owned subsidiary of Geophysical Survey Systems, Inc.
 - manufacturer of ultra-wideband ground penetrating radar for 36 years
 - holds 11 FCC certifications.

UltraSensor Device

- ❑ Advanced ultra-wideband (UWB) surveillance sensor
- ❑ Buried under pavement or lawn
 - invisible, tamper-proof, weatherproof, no maintenance
- ❑ Tracks intruder's location, velocity, mass
 - can be programmed to ignore weather and small objects
 - eliminates troublesome false alarms common to other technologies
- ❑ Ideal for critical infrastructure, homeland security
 - nuclear power plants, harbor facilities, airports, rail terminals, chemical plants, pipeline pumping stations, wireless towers, transformer farms, government installations, etc.

Technical Summary

- ❑ UWB bandwidth typically within 80-600 MHz, always below 700 MHz
- ❑ Under the lowest UWB limits in every band
 - complies with Section 15.209 below 960 MHz
 - complies with GPS limits
- ❑ Negligible emissions above 900 MHz
- ❑ UWB pulses are 2 nsec wide at 20-80 kHz
 - duty cycle: -38 dB to -44 dB
 - pulses dithered; units do not emit simultaneously.



Regulatory Issues -- 1

Section 15.511 provides:

(a) The UWB bandwidth of an imaging system operating under the provisions of this section must be contained between 1990 MHz and 10,600 MHz. . . .

(c) The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in Sec. 15.209. . . .

- ☐ Does not comply with (a) -- no emissions above 960 MHz
- ☐ Does complies with (c).

Regulatory Issues -- 2

Section 15.511(b) provides:

Operation under the provisions of this section is limited to fixed surveillance systems operated by law enforcement, fire or emergency rescue organizations or by manufacturers licensees, petroleum licensees or power licensees as defined in Sec. 90.7 of this chapter.

- ❑ But UltraSensor has no emissions in the bands protected by this rule.

Opposition

- ❑ Association for Maximum Service Television, Inc. (MSTV)
 - opposes on ground that Sec. 15.209 emissions below 960 MHz may cause interference to TV reception.

Requested Waiver Is Justified

1. UltraSensor is quieter than a compliant device
2. Marketing limitations do not apply
 - UltraSensor is quieter than devices with ***no*** marketing limitations
3. Newly proposed conditions fully address MSTV's concerns.

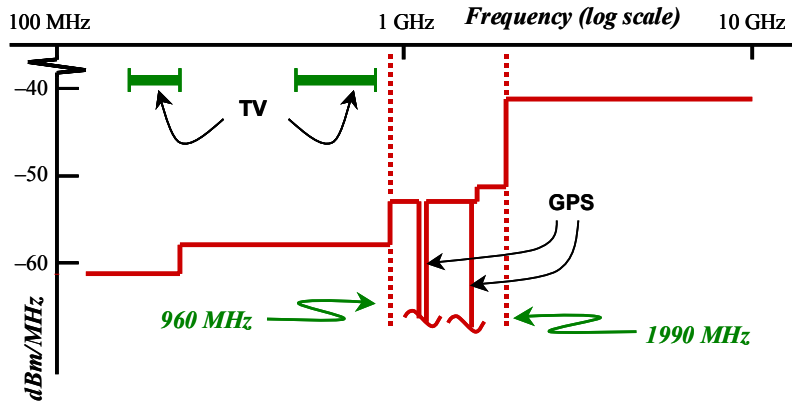


Figure 1
Emissions limits applicable to UWB surveillance systems

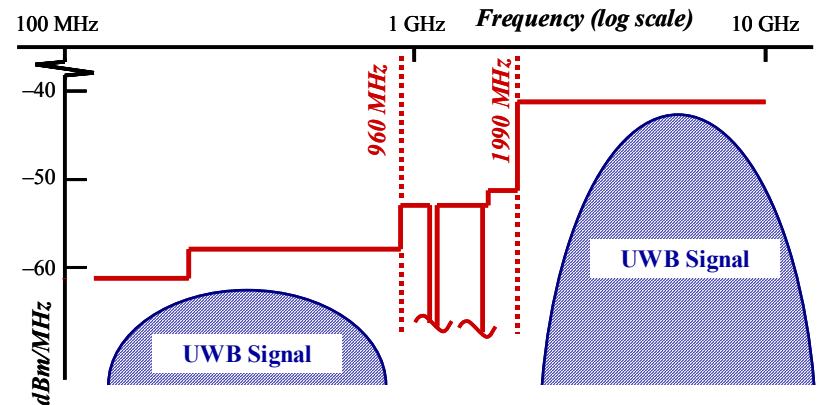


Figure 3
Hypothetical compliant "double-emitter" UWB surveillance system

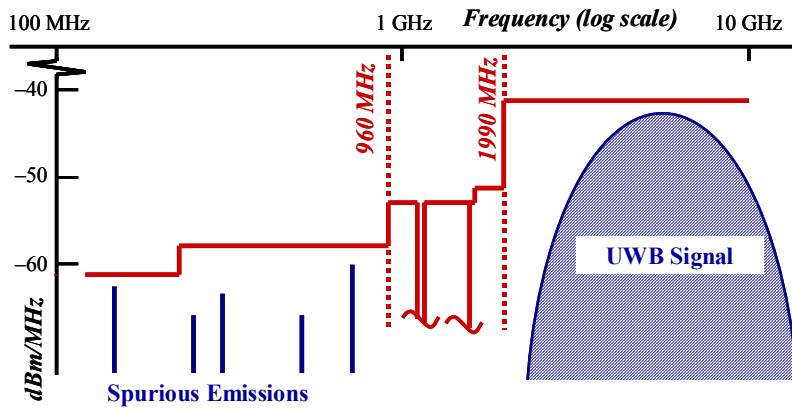


Figure 2
"Single-emitter" UWB surveillance system

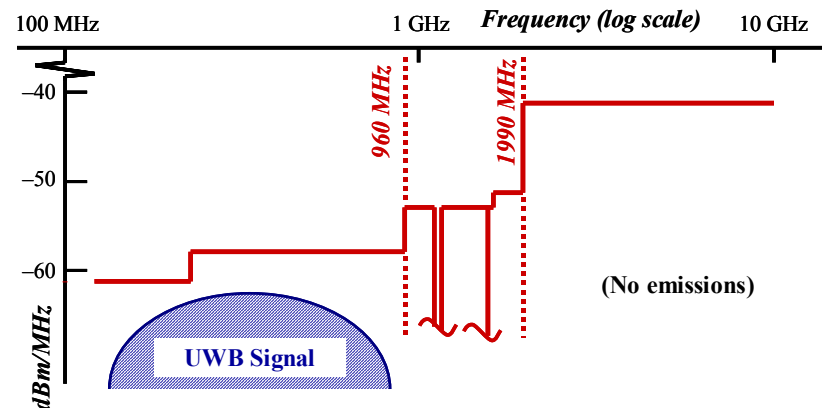


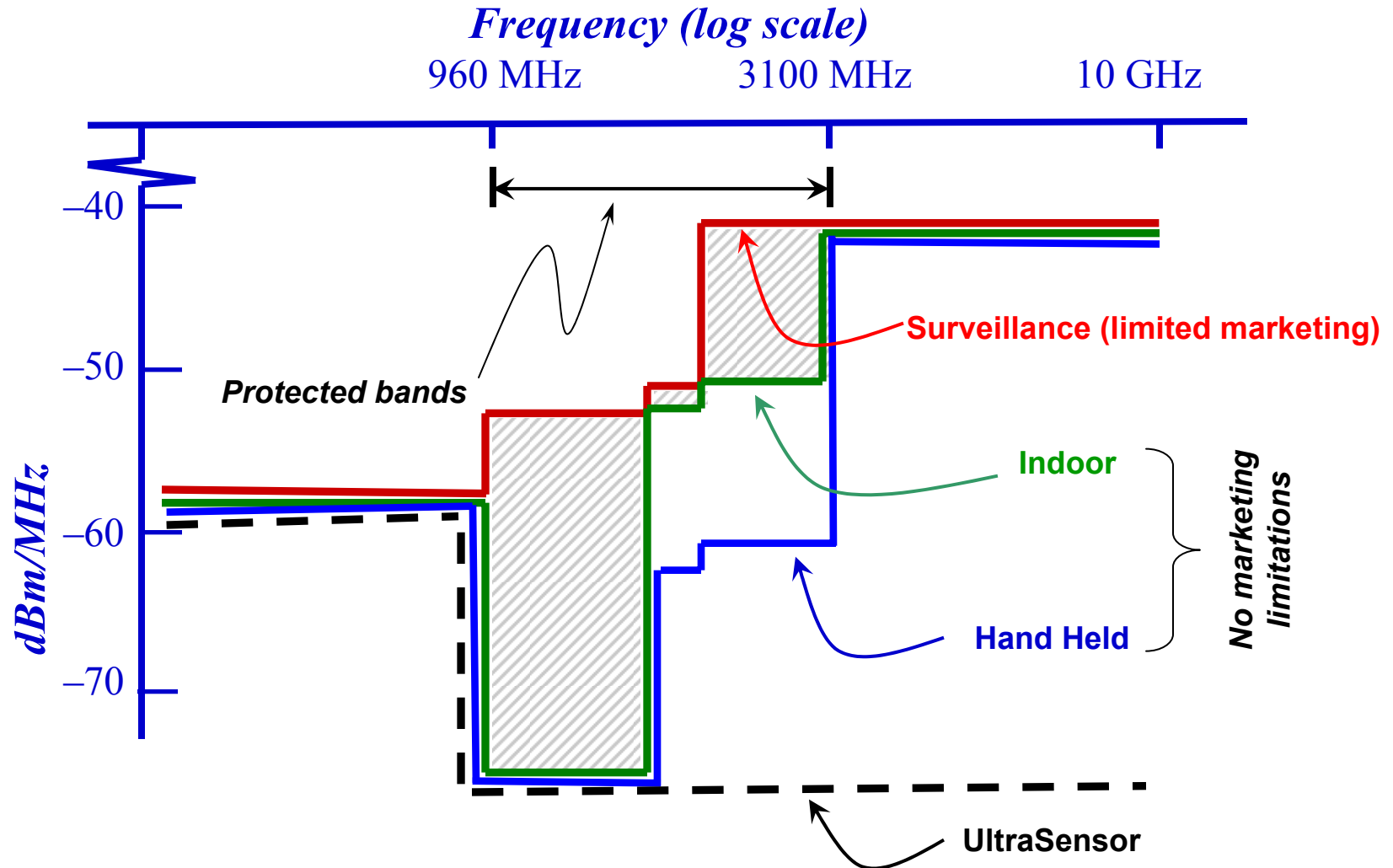
Figure 4
Emissions from UltraSensor are lower than from double-emitter system

Marketing Limitations Unnecessary -- 1

- ❑ Devices with limited marketing:
 - surveillance, GPR, medical, in-wall, through-wall above 1990 MHz
- ❑ Devices with no marketing limitations:
 - hand held, indoor, through-wall below 960 MHz*
- ❑ **Only** difference: limited-marketing group has higher emissions at 960-3100 MHz (next slide)
- ❑ UltraSensor has **no** emissions at 960-3100 MHz
- ❑ No rationale for marketing limitations.

* May not be sold to consumers, otherwise unlimited.

Marketing Limitations Unnecessary -- 2



No Interference to TV

- ❑ MSTV: a device compliant with Section 15.209 “could cause interference to DTV sets at distances up to 78 feet and interference to analog TV sets up to 452 feet.”*
- ❑ UltraVision: no installation within 140 meters (452 feet) of a residentially zoned area through 2/18/2009
 - and no installation within 24 meters (78 feet) of residential zoning after 2/18/2009 (when analog TV ceases).

* Comments of the Association for Maximum Service Television, Inc. in ET Docket No. 06-195 at 6 (filed Feb. 20, 2007).

No Interference to Other Services

- ❑ Low emissions -- complies with Section 15.209
 - no emissions above 960 MHz
- ❑ Low duty cycle, maximum -38 dB
 - compliance measurements use quasi-peak
 - UltraSensor emits far less energy than other compliant devices
- ❑ Installed below ground level
 - signal cannot propagate far
- ❑ Always at a fixed location
 - precise coordination possible.

Proposed Waiver Conditions

- ❑ Permanently installed at fixed locations
- ❑ Records kept of all locations
 - will coordinate in advance if required
- ❑ No sales to consumers
- ❑ No installation near residences
 - separation distances as specified by MSTV
- ❑ Installation only by licensed security companies
- ❑ Customers informed of no-interference conditions
- ❑ Operation must cease if harmful interference cannot be corrected.

Thank you!

Mitchell Lazarus | 703-812-0440 | lazarus@fhhlaw.com